

Notice of Allowability

Application No.

10/657,010

Examiner

Paul A Baker

Applicant(s)

ACHIWA ET AL.

Art Unit

2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 28 March 2005.
2. ☒ The allowed claim(s) is/are 17,19-22 and 24.
3. ☒ The drawings filed on 05 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/854125.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 3/04,10/04,4/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on 28 March 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 6,643,750 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

Claims 17, 19-22 and 24 are allowed.

In regards to claim 17, none of the prior art discloses a two storage systems each containing a disk controller and one or more disks connected via a network, wherein the first disk controller stores data received from a host computer to a first storage area within the first storage system and sends the data to the second storage system which stores the data to a third storage area within the second storage system; the first storage system receiving an instruction from the host computer and sending data stored within the first storage area at the time the instruction was received, receiving subsequent update data and storing in a manner which can be distinguished from the original data, the second disk controller storing the received data and storing within the third storage area, the first storage controller sending a second instruction to the second disk controller and sending the updated data to the second controller whereupon the second controller stores the received data from the third storage area to a fourth storage area in the second storage system such that the updated data can be

distinguished from the original data in combination with the other specified claim limitations.

Claims 19-22 are allowed as being dependent upon claim 17.

In regards to claim 24, none of the prior art discloses a first storage system comprising of a disk controller and one or more disks, wherein the controller stores data received from a host computer and send the data to a second storage system, after receipt of a first instruction from the host computer the disk controller sends data stored within the first storage area at the time of the instruction to the second storage system, receives further updated data and stores the data in a manner that the data can be distinguished from the original data, wherein the disk controller stores the updated data to the first storage area if the original data was already sent to the second storage system and storing to a second storage area if the original data has not been sent to the second storage system in combination with the other specified claim limitations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Baker whose telephone number is (571)272-4203. The examiner can normally be reached on M-F 10am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on (571)272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2188

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PB

Mano Padmanabhan
5/2/05

MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER